



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,504	01/15/2004	Robert Beach	022.0119 (1562P)	6158

29906 7590 08/24/2006

INGRASSIA FISHER & LORENZ, P.C.
7150 E. CAMELBACK, STE. 325
SCOTTSDALE, AZ 85251

EXAMINER

MILORD, MARCEAU

ART UNIT PAPER NUMBER

2618

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/758,504

Applicant(s)

BEACH ET AL.

Examiner

Marceau Milord

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13, 15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Connolly et al (US Patent No 6764012 B2) in view of White et al (US Patent No 6694125 B2) and Striemer (US Patent No 7079808 B2).

Regarding claims 1-11, Connolly et al discloses a wireless data communications device (figs. 16-17), arranged to be installed in a light fixture having a lamp socket for receiving a lamp (col. 9, lines 2-56), comprising: a housing containing a wireless data communications radio arranged to communicate with mobile units and other fixed wireless communications devices forming a data communications network (col. 5, lines 26-46; col. 8, lines 19-33).

Connolly et al does not specifically disclose the feature of a connector on a housing arranged to engage said lamp socket on said light fixture; a socket on said housing arranged to receive a connector of a lamp and connected to receive power from said connector on said

Art Unit: 2618

housing; and a power supply in said housing arranged to receive power from said connector on said housing and provide power to said wireless data communications radio.

On the other hand, White et al, from the same field of endeavor, discloses a system that can include repeaters and/or network decoders, each of which is housed in a network module. The network module includes a first portion for insertion into a powered outlet. The first portion receives power from the powered outlet. The network module further includes a second portion for receiving a powered device, and an electronic housing that is coupled to the first and second portions. The electronic housing encloses an electronic unit for receiving power from the first portion and selectively providing power to the second portion. The electronic unit can also include a repeater for receiving commands and re-broadcasting the commands, and/or an active network device for receiving commands, decoding the commands, and controlling at least one device based on the command. The electronic unit can receive signals and transmit signals via a wired connection or a wireless link (col. 2, line 53- col. 3, line 18; col. 4, lines 11-61; col. 5, line 58- col. 6, line 30).

Strierner also discloses a wireless repeater and controller that are placed between a light socket and a light bulb, such as in a ceiling light fixture. The wireless repeater and controller have an extending threaded portion that screws into the light socket, and a recessed threaded portion that receives a light bulb. When the light switch that would normally control the light bulb is on, power is provided to the wireless repeater and controller. When the power to the wireless repeater and controller is toggled on then off using the light switch, the wireless repeater and controller disconnects line power from the light bulb so the light switch can still be used to control the light bulb (col. 1, line 49- col. 2, line 3). Furthermore, the control circuitry includes a

Art Unit: 2618

power supply, a line detector, a switching mechanism, a processor, a receiver antenna, a radio frequency receiver, an RF transmitter and a transmitter antenna. Note also that additional RF receivers, RF transmitters, and antennas could also be included to allow the device to communicate with different types of wireless devices. This would allow, for example, repeating messages received in one protocol by one type of radio transceiver in a different protocol using a different type of radio transceiver. Thus, a Bluetooth message could be re-transmitted as an IEEE 802.11 message, and vice versa. Note that power supply 510 includes a temporary power supply 512 that supplies power to the circuit 500 when the Line In power from the light socket is turned off temporarily (figs. 2-3, 5; col. 6, line 5-51; col. 7, lines 9-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Striemer to the modified system of White and Connolly in order to allow a user the flexibility to control the light via wireless commands.

Regarding claims 12-13, 21, Connolly et al discloses a wireless data communications device (figs. 16-17), arranged to be installed in a light fixture having a lamp socket (col. 9, lines 2-56), comprising: a housing containing a wireless data communications radio arranged to communicate with mobile units and other fixed wireless communications devices forming a data communications network (col. 5, lines 26-46; col. 8, lines 19-33).

Connolly et al does not specifically disclose the feature of a connector on a housing arranged to engage said lamp socket on said light fixture; and a power supply in said housing arranged to receive power from said connector on said housing and provide power to said wireless data communications radio.

On the other hand, White et al, from the same field of endeavor, discloses a system that can include repeaters and/or network decoders, each of which is housed in a network module. The network module includes a first portion for insertion into a powered outlet. The first portion receives power from the powered outlet. The network module further includes a second portion for receiving a powered device, and an electronic housing that is coupled to the first and second portions. The electronic housing encloses an electronic unit for receiving power from the first portion and selectively providing power to the second portion. The electronic unit can also include a repeater for receiving commands and re-broadcasting the commands, and/or an active network device for receiving commands, decoding the commands, and controlling at least one device based on the command. The electronic unit can receive signals and transmit signals via a wired connection or a wireless link (col. 2, line 53- col. 3, line 18; col. 4, lines 11-61; col. 5, line 58- col. 6, line 30).

Strierner also discloses a wireless repeater and controller that are placed between a light socket and a light bulb, such as in a ceiling light fixture. The wireless repeater and controller have an extending threaded portion that screws into the light socket, and a recessed threaded portion that receives a light bulb. When the light switch that would normally control the light bulb is on, power is provided to the wireless repeater and controller. When the power to the wireless repeater and controller is toggled on then off using the light switch, the wireless repeater and controller disconnects line power from the light bulb so the light switch can still be used to control the light bulb (col. 1, line 49- col. 2, line 3). Furthermore, the control circuitry includes a power supply, a line detector, a switching mechanism, a processor, a receiver antenna, a radio frequency receiver, an RF transmitter and a transmitter antenna. Note also that additional RF

Art Unit: 2618

receivers, RF transmitters, and antennas could also be included to allow the device to communicate with different types of wireless devices. This would allow, for example, repeating messages received in one protocol by one type of radio transceiver in a different protocol using a different type of radio transceiver. Thus, a Bluetooth message could be re-transmitted as an IEEE 802.11 message, and vice versa. Note that power supply 510 includes a temporary power supply 512 that supplies power to the circuit 500 when the Line In power from the light socket is turned off temporarily (figs. 2-3, 5; col. 6, line 5-51; col. 7, lines 9-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Striemer to the modified system of White and Connolly in order to allow a user the flexibility to control the light via wireless commands.

Regarding claim 22, Connolly et al discloses a wireless data communications device (figs. 16-17), arranged to be installed in a florescent light fixture having first and second spaced lamp sockets arranged to receive a florescent tube (col. 9, lines 2-56), comprising: a housing containing a wireless data communications radio arranged to communicate with mobile units and other fixed wireless communications devices forming a data communications network (col. 5, lines 26-46; col. 8, lines 19-33).

Connolly et al does not specifically disclose the feature of a first and second spaced connectors on said housing arranged to engage said lamp sockets on said light fixture; and a power supply in said housing arranged to receive power from said connectors on said housing and provide power to said wireless data communications radio, said power supply further including a circuit for emulating the impedance behavior of a florescent tube.

On the other hand, White et al, from the same field of endeavor, discloses a system that can include repeaters and/or network decoders, each of which is housed in a network module. The network module includes a first portion for insertion into a powered outlet. The first portion receives power from the powered outlet. The network module further includes a second portion for receiving a powered device, and an electronic housing that is coupled to the first and second portions. The electronic housing encloses an electronic unit for receiving power from the first portion and selectively providing power to the second portion. The electronic unit can also include a repeater for receiving commands and re-broadcasting the commands, and/or an active network device for receiving commands, decoding the commands, and controlling at least one device based on the command. The electronic unit can receive signals and transmit signals via a wired connection or a wireless link (col. 2, line 53- col. 3, line 18; col. 4, lines 11-61; col. 5, line 58- col. 6, line 30).

Strierner also discloses a wireless repeater and controller that are placed between a light socket and a light bulb, such as in a ceiling light fixture. The wireless repeater and controller have an extending threaded portion that screws into the light socket, and a recessed threaded portion that receives a light bulb. When the light switch that would normally control the light bulb is on, power is provided to the wireless repeater and controller. When the power to the wireless repeater and controller is toggled on then off using the light switch, the wireless repeater and controller disconnects line power from the light bulb so the light switch can still be used to control the light bulb (col. 1, line 49- col. 2, line 3). Furthermore, the control circuitry includes a power supply, a line detector, a switching mechanism, a processor, a receiver antenna, a radio frequency receiver, an RF transmitter and a transmitter antenna. Note also that additional RF

Art Unit: 2618

receivers, RF transmitters, and antennas could also be included to allow the device to communicate with different types of wireless devices. This would allow, for example, repeating messages received in one protocol by one type of radio transceiver in a different protocol using a different type of radio transceiver. Thus, a Bluetooth message could be re-transmitted as an IEEE 802.11 message, and vice versa. Note that power supply 510 includes a temporary power supply 512 that supplies power to the circuit 500 when the Line In power from the light socket is turned off temporarily (figs. 2-3, 5; col. 6, line 5-51; col. 7, lines 9-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Striemer to the modified system of White and Connolly in order to allow a user the flexibility to control the light via wireless commands.

3. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Connolly et al (US Patent No 6764012 B2) in view of White et al (US Patent No 6694125 B2) and Striemer (US Patent No 7079808 B2) as applied to claim 12 above, and further in view of Mahany et al (US Patent No 6654378 B1).

Regarding claim 14, Connolly, White and Striemer disclose everything claimed as explained above except the features of a wireless communications radio that is arranged to act as a master device and communicate with mobile units and arranged to act as a slave device and communicate with at least one other fixed location wireless communications device.

However, Mahany shows a typical communication exchange between a peripheral LAN master device having virtually unlimited power resources and a peripheral LAN slave device. The master periodically transmits an idle sense message indicating that it is available for communication or that it has data for transmission to a slave device (figs. 11a-11b; col. 22, lines

Art Unit: 2618

30-67). In addition, the master mobile network participates as a master device in the peripheral sub network, and when within range of one of the first plurality of network devices, the mobile network device participates as a slave device in the wireless premises network (col. 5, lines 1-43). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Mahany to the modified system of Conolly, white and Striemer in order to use access point device that can be participated as a slave device to the longer range communication, and as a master device to the shorter range communication network.

Response to Arguments

4. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 571-272-7853. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MARCEAU MILORD

Marceau Milord

Primary Examiner

Art Unit 2618


MARCEAU MILORD
PRIMARY EXAMINER

8-19-06